

REMARKS/ARGUMENTS

Claims 1-21 stand in the present application, claim 17 having been amended. Reconsideration and favorable action is respectfully requested in view of the above amendments and the following remarks.

In the Office Action, the Examiner has rejected claim 17 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. As noted above, Applicant has amended claim 17 in order to correct the deficiency pointed out by the Examiner. Accordingly, claim 17 as amended is believed to overcome the Examiner's § 112, second paragraph, rejection.

The Examiner has rejected claims 1-4, 6-10, 16, 20 and 21 under 35 U.S.C. § 102(e) as being anticipated by Lundblad et al. (Lundblad). Applicant respectfully traverses the Examiner's § 102(e) rejection of the claims.

Lundblad discloses a method and apparatus for synchronizing the presentation of audio and video data which has already been delivered in a single transport stream to a client device, such as a set-top box (106) for presentation on a television (108). See Lundblad at Figure 1, column 1, lines 55-62, and column 2, line 38 to column 3, line 17. Because video data usually requires more processing than audio data within the received data stream, presentation of the audio data is delayed until processing of the video data is complete, whereupon both data types are presented so that they are synchronized with each other. Id. at column 1, lines 48 to 55. The television in this case is a uni-modal device which is capable of presenting both video and audio data.

The Examiner cites to column 1, lines 55-59 and alleges that Lundblad discloses “estimating the time needed to deliver the first information” and “estimating the time needed to deliver the second information” as required by the present claims. See Office Action at page 3 (rejection of claim 1), page 4 (rejection of claim 7) and pages 6-7 (rejection of claim 20). However, the portion of Lundblad cited by the Examiner has nothing to do with the delivery time of the information – it is actually directed to determining the relative processing time between the video and audio data.

In one embodiment, a transport stream is received containing video data and audio data. This embodiment determines the time required to process the video data contained in the transport system and the time to required to process the audio data contained in the transport stream. A determination is made regarding the difference in time to process the video data contained in the transport stream as compared to the audio data contained in the transport stream.

See Lundblad at column 1, lines 55-62 (emphasis supplied). Since elements i) and ii) of present independent claims 1, 7, and 20, respectively, require “estimating total time needed to deliver the first information . . . ” and “estimating total time needed to deliver the second information . . . ” which is not taught or suggested by Lundblad, these claims and their respective dependent claims patentably define over the cited reference for this reason alone. Moreover, element iii) of independent claims 1, 7, and 20 requires “using the estimates” obtained and, since Lundblad does not teach or suggest this claim element the present claims patentably define over the cited reference for this reason as well.

Contrary to Lundblad, Applicant's invention is directed to a multi-modal device and its operating method. This means that more than one data stream is presented via possibly more than one presentation to the user, and it is the delivery of these data streams which need to be coordinated and synchronized with each other. Hence the need to estimate the time of delivery for each data stream.

Applicants claimed multi-modal system and operation is shown and described in the present application at Figure 1, and page 5, line 33 to page 6, line 16. At the user end is a telephone (20) and a VDU (26) which respectively enable an audio and a video presentation to a user. In the description of an exemplary session, the audio presentation is delivered by an interactive voice response (IVR) system via the PSTN, and the video presentation is supplied by using a web browser via the Internet. Id. at page 6, line 17 to page 11, line 2. The presentation is thus delivered via the two modalities of the telephone and the computer VDU via entirely different systems in unrelated streams.

On their way to their respective destination presentation modalities (the telephone and the VDU), each stream could be subject to or dependent upon various factors affecting their speed and time of delivery, such as network latency (see present specification at page 12, line 14 to page 16, line 9), network bandwidth (see present specification at page 16, line 12 to page 19, line 2), and document size (see present specification at page 19, line 3 to page 20, line 23).

The video and audio data elements of Lundblad suffer none of these problems – they are contained in a single stream which is received by the set top box which is presented on a television which is capable of outputting both sound and vision – thus it should not be surprising that the cited reference does not teach or suggest estimating the time needed to deliver first and second information let alone the use of the estimates. As noted, Lundblad describes a uni-modal device which receives a single transport stream containing separate audio and video data portions, where the video processing takes more time than the audio element. The synchronization is directed to the ensuring the coordination of the two portions already received in the one transport stream. In contrast, Applicant's inventions are directed to a multi-modal system and its operation comprising a number of presentation modes, each of which receives a separate independent stream of information.

Accordingly, present claims 1-21 are respectfully submitted to patentably define over Lundblad.

The Examiner has also rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Lundblad in view of Dutta et al. and has rejected claims 11-15 and 17-19 under 35 U.S.C. § 103(a) as being unpatentable over Lundblad in view of Grove et al. Applicant respectfully traverses the Examiner's § 103 rejection of these claims.

It is respectfully submitted that the secondary references of Dutta et al. and Grove et al. do not solve the deficiencies noted above with respect to Lundblad. More particularly, the Examiner has cited Dutta et al. merely for disclosing a data output means for a visually impaired user and has cited Grove et al. merely for teaching the

Richard WISEMAN
Appl. No. 10/509,084
April 23, 2008

measurement of the latency of a data transmission from one node to another.

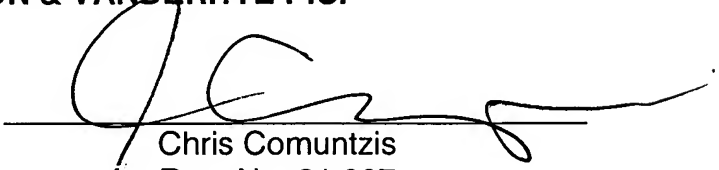
Accordingly, it is clear that these secondary references do not solve the deficiencies noted above with respect to Lundblad and accordingly these claims are also believed to patentably define over the cited references taken either singly or in combination.

Therefore, in view of the above amendments and remarks, it is respectfully requested that the application be reconsidered and that all of claims 1-21, standing in the application, be allowed and that the case be passed to issue. If there are any other issues remaining which the Examiner believes could be resolved through either a supplemental response or an Examiner's amendment, the Examiner is respectfully requested to contact the undersigned at the local telephone exchange indicated below.

Respectfully submitted,

NIXON & VANDERHYTE P.C.

By: _____


Chris Comuntzis
Reg. No. 31,097

CC:lmr
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100